

# BLOCK SERIES C1

HAZARDOUS LOCATION LED LUMINAIRE



**Reliable. Durable. Efficient.**  
**10,000 to 19,000 lumen models**

**RED SKY**  
SERIOUSLY SAFE LIGHTS™

# PIONEERING INDUSTRIAL ILLUMINATION FOR HARSH & HAZARDOUS CONDITIONS

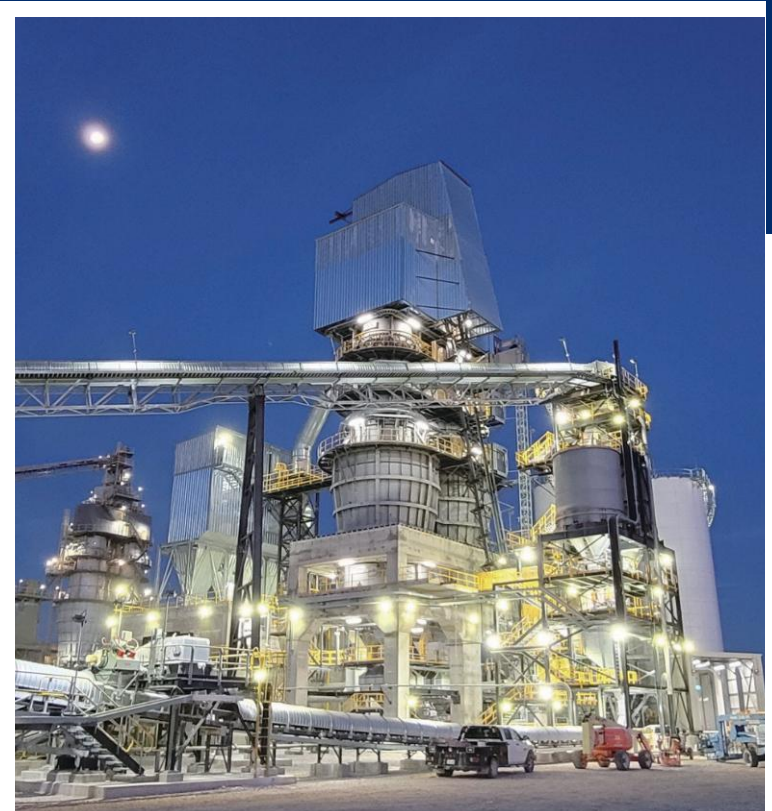
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A leading manufacturer of premium LED lights for demanding work conditions

Headquartered in California, products assembled in the USA

Servicing global clients across 4 continents in metal processing, oil & gas, marine, manufacturing

Renowned for quality, dependability, client care and uncompromising safety standards



## WHY CHOOSE RED SKY

### ❧ SERIOUSLY SAFE LIGHTS

- Rigorously tested in our professional labs
- Surpassing industry certifications and safety protocols
- Crafted with highest grade components for maximum durability

### ❧ TOP-NOTCH SERVICES

- Team of experts for seamless support
- Energy audit services, lighting simulation services
- Hassle-free return policy and management

### ❧ FAST DELIVERY

- Majority of orders delivered within 14 days
- Same day shipping for products in stock
- Real-time order tracking for full transparency

### ❧ SUSTAINABLE SOLUTIONS

- High luminous efficacy LEDs for energy savings
- Conscious product design
- Recyclable materials for products and packaging



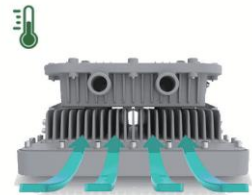
**BLOCK SERIES**

## **FEATURES**



### **Excellent Heat Dissipation**

Self-contained LED and Driver compartment with external air-flow fins provide exceptional heat dissipation to ensure long lifespan



### **Easy and Through Wiring**

Built-in wiring compartment with two NPT 3/4" entries and A quick-access WAGO 5-pole lever connector that allows for easy wire-in / wire-out connection. (1mm<sup>2</sup>-4mm<sup>2</sup>)



## **RATINGS**

Zone 1&2  
 Zone 21&22  
 IP66  
 IK09  
 Salt Spray 720 hrs (ISO 9227)

## **CERTIFICATIONS**

**IECEX**  
 Ex db IIB T6 Gb  
 Ex tb IIIC T85°C Db

**UKEX**  
 II 2G Ex db IIB T6 Gb  
 II 2D Ex tb IIIC T85°C Db  
**CE EMC/LVD**

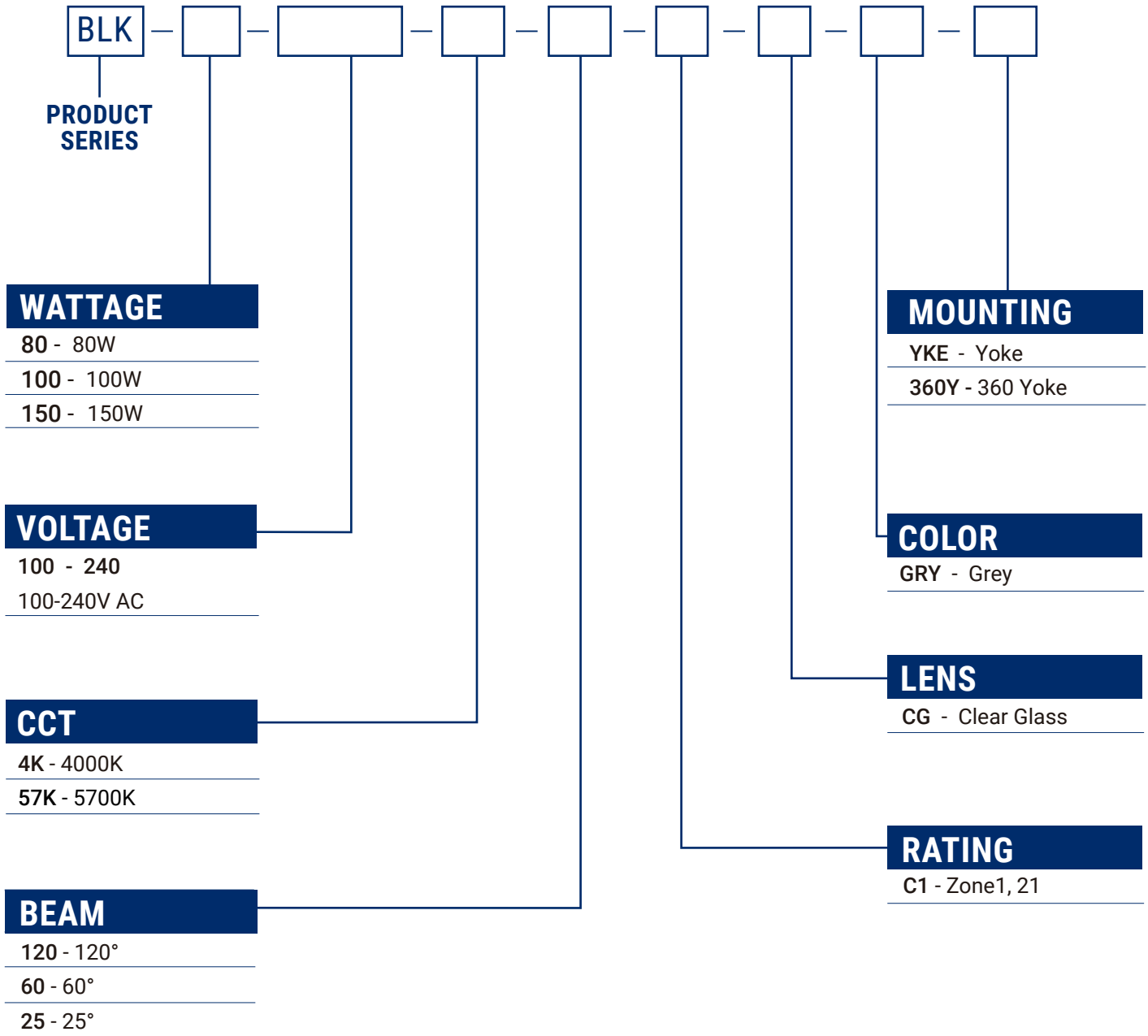
# TECHNICAL PARAMETERS

Specification	BLK-C1-80	BLK-C1-100	BLK-C1-150
<b>Electrical Parameters</b>			
Power	80W	100W	150W
Rated Input Current (220V AC)	0.404A	0.505A	0.758A
Voltage/Frequency	100-240V AC, 50/60Hz		
Power Factor	≥0.90		
THD	<20%		
L70	420,000 hrs@50°C		
Surge Protection	L/N-FG 4KV, L-N 2KV		
Supply Wire	1mm <sup>2</sup> -4mm <sup>2</sup> , Rated 90°C		
Warranty	5 Years		
<b>Optical Parameters</b>			
Lumen Output*	10,288Lm	12,274Lm	18,646Lm
Lumen Efficacy*	130Lm/W		
Available Beam Angle	25° / 60° / 120°		
Correlated Color Temperature (CCT)	4000K/5700K		
Color Rendering Index (CRI)	Ra>70		
<b>Mechanical Parameters</b>			
Housing Material	Marine Grade Aluminium		
Hardware	Stainless steel 316		
Lens Material	Tempered Glass		
Mounting Options	Yoke, Stanchion		
Product Weight	33.5lbs/15.2kg	33.7lbs/15.3kg	34.2lbs/15.5kg
Package Weight	37.9lbs/17.2kg	38.1lbs/17.3kg	38.6lbs/17.5kg
Cable Entry	(2) 3/4" NPT		
Product Dimensions(L×W×H)	12.9×10.7×6.9in (328×271×176mm)		
Package Dimensions(L×W×H)	15×14.2×10.2in (380×360×260mm)		
<b>Environmental Parameters</b>			
Ambient Operating Temperature	-25°C ~ +50°C		
T-Code Rating	Gas – T6, Dust – 85°C		
EPA wind rating (FT2/m2)	1.715/0.160 (Yoke), 1.735/0.161 (Stanchion)		

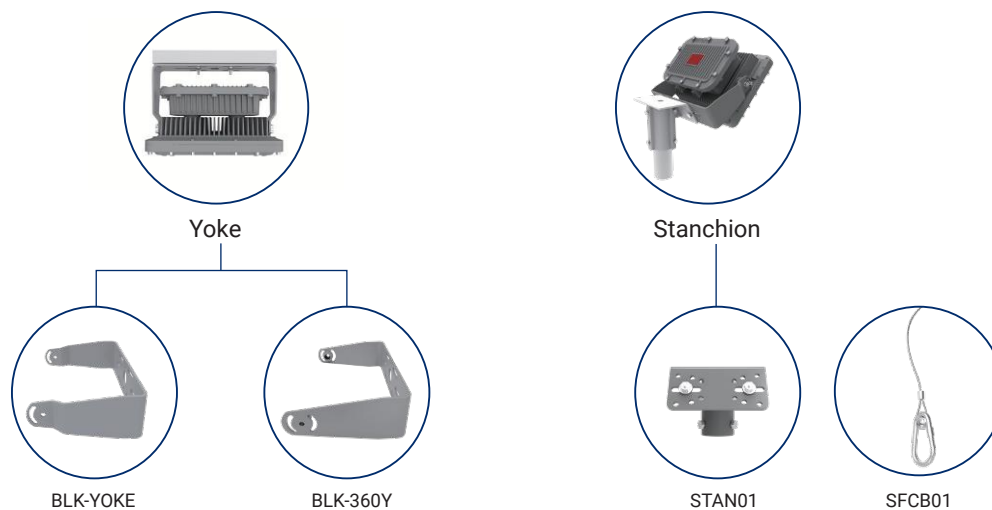
\* value calculated based on 5700K and clear glass ,varies to different spec.

# ORDERING INFORMATION

**EXAMPLE:** BLK-80-100-240-57K-120-C1-CG-GRY-YKE



## MOUNTING ACCESSORIES



Mounting	PN	Description	MPN Code
Yoke	BLK-YOKE	Yoke Mount, SUS304, Powder-Coated Grey RAL 7037	210010013
	BLK-360Y	360-Degree Rotation Yoke Mount, SUS304, Powder-Coated Grey RAL 7037	210010082
Stanchion	STAN01*	Slip-Fit Stanchion Mount Kit for $\Phi$ 2 inch (2-3/8 inch OD, 60mm OD) Poles, Non-Threaded, SUS304, Powder-Coated Grey RAL 7037	210010031
	SFCB01	Safety Cable Kit, SUS304	210010086

\* Requires A Yoke Mount

## REPLACEMENT PARTS (ORDERED SEPARATELY)

Part Number	Description	MPN Code
BLK-C1-80-Driver	Replacement Driver Kit for BLK-C1-80 Fixtures	303010075
BLK-C1-100-Driver	Replacement Driver Kit for BLK-C1-100 Fixtures	303010076
BLK-C1-150-Driver	Replacement Driver Kit for BLK-C1-150 Fixtures	303010077

## LUMEN TABLE

Part Number	Wattage (W)	CCT	Beam	Lens	Lumen Output (Lm)	Efficiency (Lm/W)
<b>Voltage 100-240V AC</b>						
BLK-80-100-240-57K-120-C1-CG-GRY-YKE	80	5700K	120	Clear Glass	10,288	124
BLK-80-100-240-57K-60-C1-CG-GRY-YKE	80	5700K	60	Clear Glass	10,386	127
BLK-80-100-240-57K-25-C1-CG-GRY-YKE	80	5700K	25	Clear Glass	10,693	130
BLK-100-100-240-57K-120-C1-CG-GRY-YKE	100	5700K	120	Clear Glass	12,274	124
BLK-100-100-240-57K-60-C1-CG-GRY-YKE	100	5700K	60	Clear Glass	12,679	129
BLK-100-100-240-57K-25-C1-CG-GRY-YKE	100	5700K	25	Clear Glass	13,144	133
BLK-150-100-240-57K-120-C1-CG-GRY-YKE	150	5700K	120	Clear Glass	18,646	122
BLK-150-100-240-57K-60-C1-CG-GRY-YKE	150	5700K	60	Clear Glass	19,070	125
BLK-150-100-240-57K-25-C1-CG-GRY-YKE	150	5700K	25	Clear Glass	19,894	131

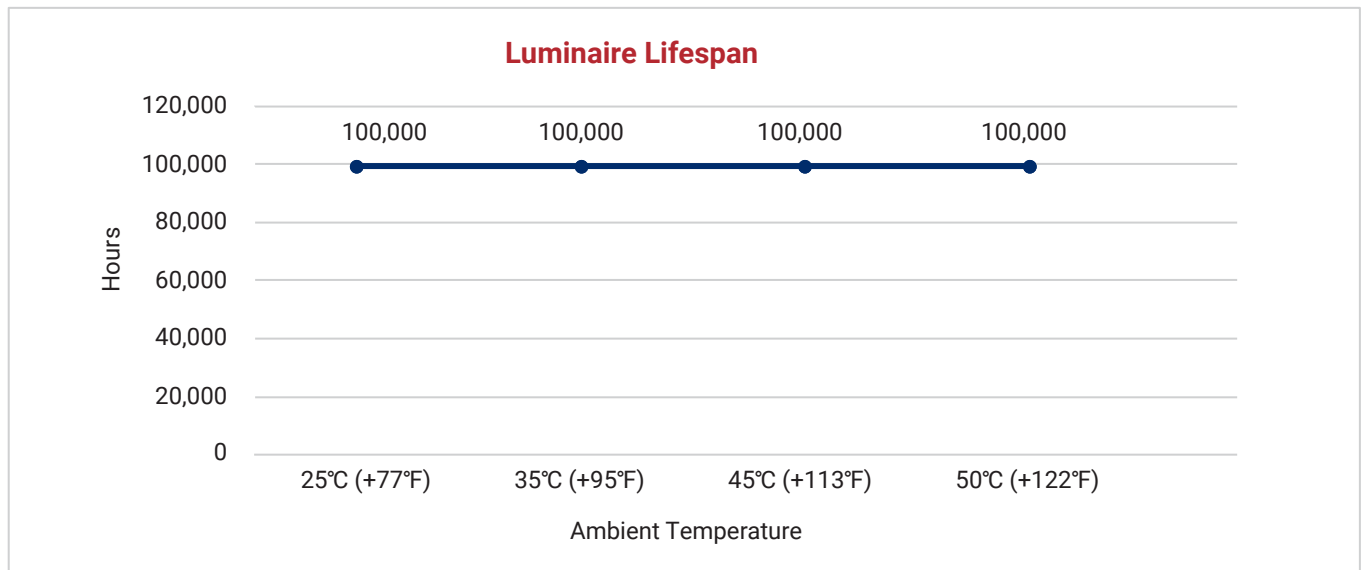
This table lists only selected lumen packages. For additional model parameters, please contact our sales team.  
Note: LXX# = nominal lumens. Verify lumen package before ordering.

# LUMEN MAINTENANCE

Hours Ambient	0	15,000	30,000	45,000	60,000	75,000	90,000	100,000	150,000
25°C	100%	99%	98%	97%	95%	94%	93%	93%	89%
35°C	100%	99%	98%	97%	95%	94%	93%	93%	89%
45°C	100%	99%	98%	97%	95%	94%	93%	93%	89%
50°C	100%	99%	98%	97%	95%	94%	93%	93%	89%

# LUMINAIRE LIFESPAN

Ambient Temperature	Luminaire Lifespan (Hours)	Rated Service Life - Years (24/7 Operation)	Rated Service Life - Years (12/7 Operation)
25°C (+77°F)	100,000	11	23
35°C (+95°F)	100,000	11	23
45°C (+113°F)	100,000	11	23
50°C (+122°F)	100,000	11	23



Information shown for reference only and may vary by configuration.

# A DIRECT RETROFIT FROM HID TO LED

The BLK C1 series LED is easy to retrofit in the same configuration as your existing HID luminaires. For example, a 150-watt Block (BLK-150-C1) delivers virtually the same illumination as its equivalent 400 watt MH luminaire while providing 75% reduction in energy costs and up to 140,000 hours of continuous operation.


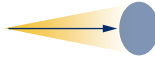
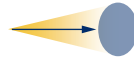




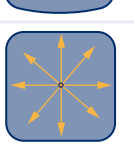
MODELS	Lumen Output (Lm)	MH Equivalent (W)	HPS Equivalent (W)
BLK-80-C1	10,288	250	310
BLK-100-C1	12,274	250	310
BLK-150-C1	18,646	400	400

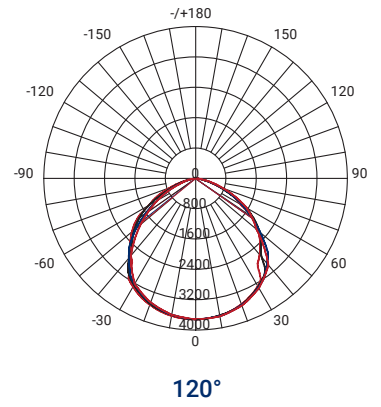
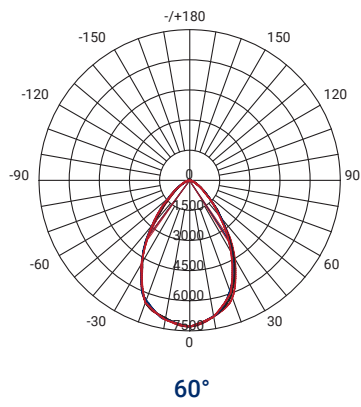
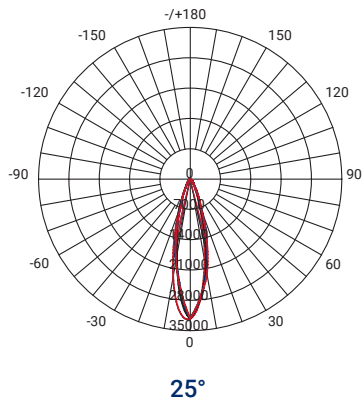
# THE RIGHT BEAM PATTERN FOR YOUR APPLICATION

RSL optic package is engineered to deliver maximum footcandles efficiently where you need them, without wasted light or overspill.

RSL offers complimentary lighting design services for our products using industry-leading AGI32 software, tailored for projects of all sizes in harsh and hazardous locations. We assist you in determining the number of fixtures needed, the types of lights to use, their optimal placement, and how to maximize energy savings—all within budget.

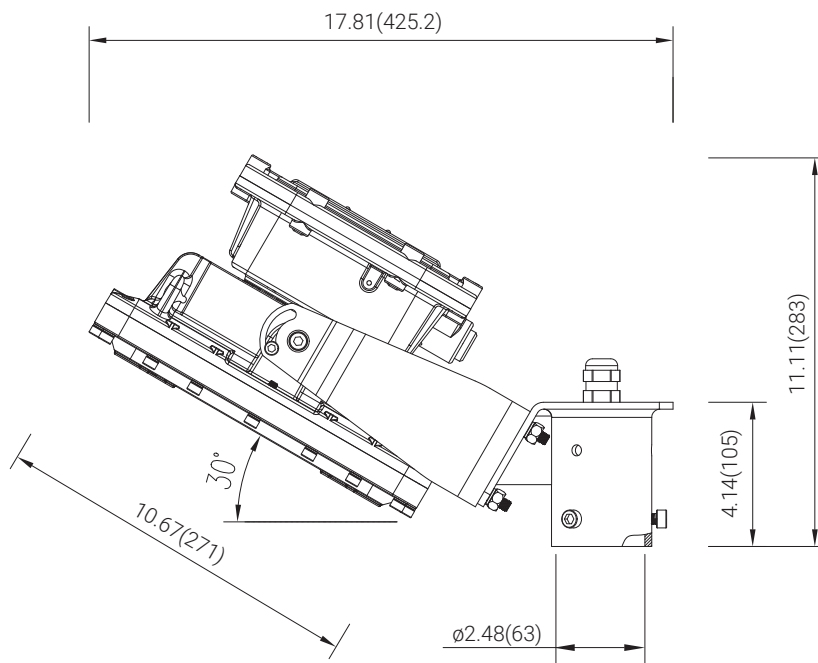
Simply fill out the form (<https://dev.redskylighting.com/lighting-design>) with a few key details, request a layout, and we'll bring your ideas to life within 2-5 business days.

Beam	NEMA/IESNA Type	Beam Description	Beam Projection Distance
30°	NEMA 3	Medium Narrow	
60°	NEMA 4	Medium	
90°	NEMA 5	Medium Wide	
120°	NEMA 6	Wide	
T1	Type I	Asymmetric distributions, well suited for narrow areas, such as Conveyor belts, Aisleways, Catwalks, Loading docks and Tunnels.	
T2	Type II	Asymmetric distributions, well suited for narrow areas, such as roadways, paths and driveways.	
T3	Type III	Asymmetric distributions, well suited for site / area perimeters, wide roadways, and open areas.	
T5	NEMA 7 Type V (Square)	Very Wide: symmetrical pattern with excellent uniformity for large, open areas.	



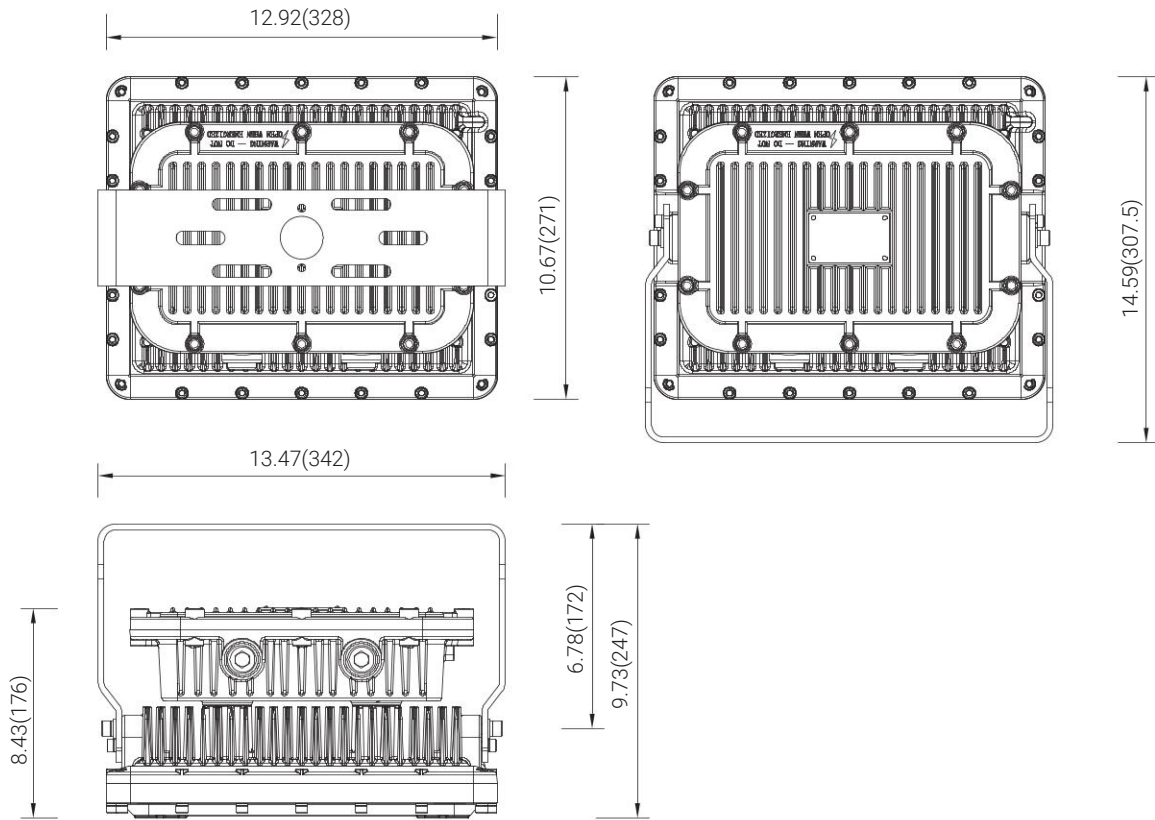
## DIMENSIONS

unit: in(mm)

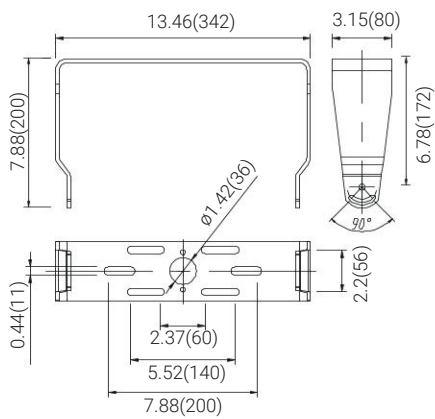


Stanchion

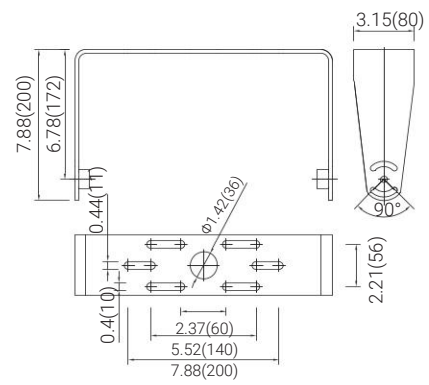
unit: in(mm)



Yoke



BLK-YOKE



YOKE-360Y

# HAZARDOUS LOCATION LIGHTING BASICS

## Atmosphere Groups

## Temperature Classification

Substance	Hazard Class	Division Groups	Zone Groups	Max. Surface Temperatures	NEC®500 CEC®	NEC®505/IEC-Group II
Acetylene	Class I Flammable Gases	Group A	IIC	450°C(842°F)	T1	T1
Hydrogen		Group B	IIC	300°C(572°F)	T2	
Ethylene		Group C	IIB	280°C(536°F)	T2A	T2
Propane		Group D	IIA	260°C(500°F)	T2B	
Methane		Group D	IIA <sup>2</sup>	230°C(446°F)	T2C	
Combustible Metal Dusts	Group E <sup>1</sup>	IIIC <sup>3</sup>	215°C(419°F)	T2D		
Combustible Carbonaceous Dust	Class II Combustible Dusts	Group F	IIIB <sup>3</sup>	200°C(392°F)	T3	T3
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB <sup>3</sup>	180°C(256°F)	T3A	
Combustible Fibers and Flyings		Class III Fibers and Flyings	Not Applicable	IIIA <sup>3</sup>	165°C(329°F)	
				160°C(320°F)	T3C	
				135°C(275°F)	T4	T4
				120°C(248°F)	T4A	
				100°C(212°F)	T5	T5
				85°C(185°F)	T6	T6

Note 1: Group E is applicable to Class II, Division 1 only.  
 Note 2: Methane is a Group IIA Gas for non-mining applications.  
 Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.

## Classification of Divisions and Zones

Hazard Level	Division Scheme	Zone Scheme	Definitions
Continuous Hazard	Division 1	Zone 0 / Zone 20	A place in which an explosive atmosphere is continually present
Intermittent Hazard		Zone 1 / Zone 21	A place in which an explosive atmosphere is likely to occur in normal operation
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A place in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods

## IP Codes

1st No.	Solid Objects
0	No protection
1	Objects greater than 50mm
2	Objects greater than 12.5mm
3	Objects greater than 2.5mm
4	Objects greater than 1mm
5	Dust protected
6	Dust proof
2nd No.	Liquids
0	No protection
1	Vertically dripping
2	Dripping up to 15°
3	Limited spraying
4	Splashing from all directions
5	Hosing jets from all directions
6	Strong hosing jets from all directions
7	Temporary immersion
8	Continuous immersion
9	Steam-jet cleaning

## IK Ratings

IK Code	Level of Protection Achieved
IK00	Not protected
IK01	Protected against 0.14 joules impact
IK02	Protected against 0.2 joules impact
IK03	Protected against 0.35 joules impact
IK04	Protected against 0.5 joules impact
IK05	Protected against 0.7 joules impact
IK06	Protected against 1 joules impact
IK07	Protected against 2 joules impact
IK08	Protected against 5 joules impact
IK09	Protected against 10 joules impact
IK10	Protected against 20 joules impact



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**Disclaimer**

All product information is subject to change without notice.  
Please contact Red Sky Lighting or your sales representative for the most up-to-date specifications.